

SP100/120 Spin-On Filters

Working Pressures to:

150 psi / 1035 kPa / 10.3 bar

Rated Static Burst to:

250 psi / 1725 kPa / 17.2 bar

Flow Range To:

100 gpm / 379 lpm

Features

SP100/120 double filter head allows for double the flow capacity and a unique, space-saving configuration. Aluminum casting and nitrile seals standard. SP100/120 filters are interchangeable with SP50/60 filters.

Applications

- Fluid Conditioning Systems
- In-Plant Systems



Beta Rating

• Performance to $\beta_{\mbox{\tiny <4(c)}} = 1000$

Porting Size Options

• 1½" NPT

Replacement Filter Lengths

- 6.7" / 170mm
- 7.0" / 178mm
- 10.7" / 271mm

Standard Bypass Ratings

• 25 psi / 172.5 kPa / 1.72 bar

Assembly Weight

- 7.0 lbs / 3.2 kg (short)
- 8.8 lbs / 4.0 kg (long)

Operating Temperatures

• -22°F to 225°F / -30°C to 107°C

Filter Collapse Ratings

• 100 psid / 690 kPa / 6.9 bar

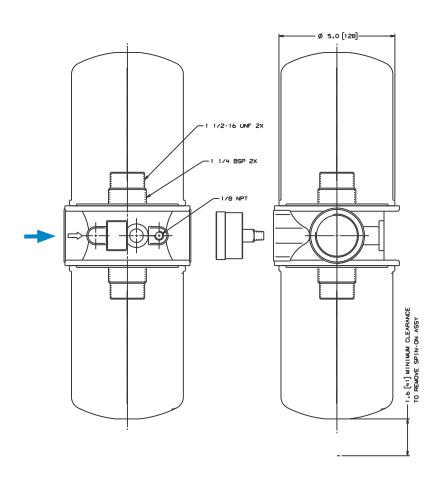
30 • Hydraulic Filtration donaldson.com

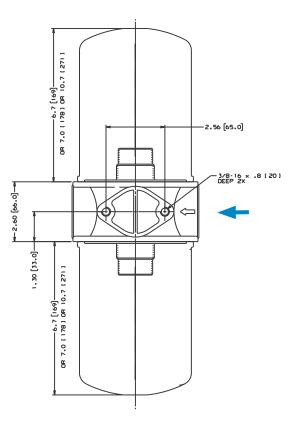
LOW PRESSURE FILTERS

SP100/120 Specification Illustrations

ASSEMBLY - SIDE VIEW

All dimensions are shown in inches [millimeters].





shop.donaldson.com Hydraulic Filtration • 31

Max Flow: 100 gpm (379 lpm)



SP100/120 Components

Filter Choices

Mark To	$\beta_{x(c)} = 2$	$\beta_{x(c)} = 1000$	Len	igth	Deat No.	O comments
Media Type	Rating based	l on ISO 16889	in	mm	Part No.	Comments
Synteq Synthetic		<4 μm	10.7	271	P167796	Fluorocarbon O-Ring & square seal kit. Compatible with water glycol.
		6 μm	6.7	170	P167162	3-seal kit
		6 μm	10.7	271	P165762	3-seal kit
		11 µm	6.7	170	P165875	3-seal kit
		11 µm	10.7	271	P165876	3-seal kit
		13 µm	6.7	170	P167944	Fluorocarbon O-Ring & square seal kit. Compatible with water glycol.
		13 µm	10.7	271	P167945	Fluorocarbon O-Ring & square seal kit. Compatible with water glycol.
		23 µm	6.7	170	P165877	3-seal kit
		23 µm	10.7	271	P165878	3-seal kit
		50 μm	6.7	170	P165879	3-seal kit
		50 μm	10.7	271	P165880	3-seal kit
Cellulose	5 μm		6.7	170	P550386	3-seal kit
	5 μm		10.7	271	P550250	3-seal kit
	7 μm		6.7	170	P550388	3-seal kit
	7 μm		10.7	271	P550251	3-seal kit
	7 μm		7.00	178	P565245	Square seal kit, 1¼" BSP thread
	17 μm		6.7	170	P550387	3-seal kit
	17 μm		10.7	271	P550252	3-seal kit
	27 μm		7.00	178	P171616	Square seal kit, 1¼" BSP thread
Water Absorbing	10 μm		10.7	271	P561183	Cellulose media, 3-seal kit. Absorbs 350 ml water.
Wire Mesh	150 µm		6.7	170	P550275	Stainless steel wire mesh, 3-seal kit
	150 µm		10.7	271	P550276	Stainless steel wire mesh, 3-seal kit

All models have $1\frac{1}{2}$ -16 UNF threads except where otherwise noted. All models measure 5.0"/127mm outer diameter.

Head Choice

Port Size	Bypass Rating	Gauge Ports (drill, tap, plug)	Gauge Port Location	Part No.
1½" NPT	25 psi / 172.5 kPa / 1.72 bar	(2) 1/8" NPT	upstream & downstream sides	P563277

Note: On a return line system the gauge port should be on the upstream side. We suggest a 25 psi bypass. If head is used on a suction line, the gauge port should be on the downstream side very low bypass.

Gaskets

Each filter ships with a 3-seal kit, containing an "L" shaped, a square cut, and an O-Ring gasket seal, unless otherwise noted. Use only one of the following seals. Installation instuctions can be found in the technical reference section.







32 • Hydraulic Filtration donaldson.com

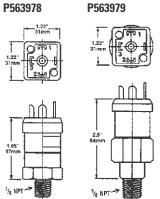




Optional Filter Service Indicators

This handy pressure gauge, mounted on the side of an SP100/120 filter head, will tell you when it's time to service the filter.

Part No.	Pressure Range	Use With Bypass Valve Rating	Туре
P563978	5 to 30 psi field adj.*	15 psi / 103.4 kPa / 1.34 bar or 25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, electrical
P563979	-5 to 15 in Hg field adj.*	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, electrical
P579714	0 to 100 psi	15 psi / 103.4 kPa / 1.34 bar or 25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, numeric scale
P579715	0 to 100 psi	15 psi / 103.4 kPa / 1.34 bar Bypass	Return indicator, color coded
P579716	0 to 100 psi	25 psi / 172.5 kPa / 1.72 bar or No Bypass	Return indicator, color-coded
P579717	0 to -30 Hg	5 psi / 34.5 kPa / .34 bar or No Bypass	Suction indicator, numeric scale

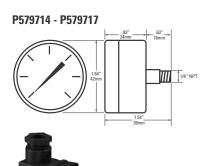


#1 Common; #2 Normally Closed; #3 Normally Open

Instructions

- 1. Remove DIN adaptor
- 2. Remove small brass screw
- 3. Using 1/8" allen wrench adjust clockwise to increase set point/counter-clockwise to decrease set point
- 4. NO / NC

Adjustment screw located in center of electric prongs



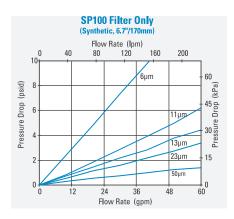


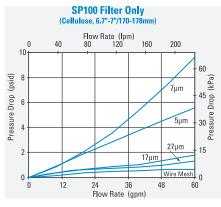


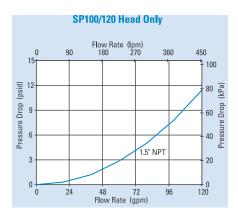
Notes

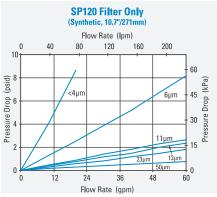
* NOT PRESET: Setting adjustable for desired application

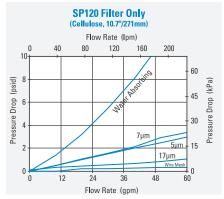
Performance Data











shop.donaldson.com Hydraulic Filtration • 33